Regents Junior Faculty Fellowship

Ryan Giordano

I propose to spend the summer of 2024 working on two collaborative research projects. The first, "neural network classifiers for Bayesian posteriors," promises to introduce a completely new set of Bayesian inference techniques with different computational tradeoffs than existing methods. The second, "black–box computable diagnostic weights for survey sampling," will bring a much–needed set of diagnostic tools to the vast majority of modern applied survey sampling. These two projects are different in scope — the first represents ground–breaking methodological research, and the second an application of my existing research to an urgent applied problem — but each rests on and contributes to my existing work on approximate Bayesian computation and sensitivity analysis.

Neural network classifiers for Bayesian posteriors

Black–box computable diagnostic weights for survey sampling

References